

LARGE FIRE LABORATORY

VISION

Reduce fire related casualties and property losses through safe, large scale fire experiments and metrology

MISSION

1. Develop improved fire metrology capabilities for large fires
2. Conduct model validation/verification experiments in intermediate and large-scale settings
3. Help set standards for fire testing

CAPABILITIES

- 9x37 m Test Area
- 3,300 Standard Cubic Meters/Min Flue Gas Cleaning System
- 6x6 m and 9x12 m Calorimetry
- 380 Channel Data Acquisition System

ONGOING PROGRAMS

- WTC Investigation
- RI and Chicago Investigations
- Nuclear Regulatory Commission Fire Model Validation
- CPSC Mattress Evaluations
- Wildland Urban Interface Experiments
- Structure Separation Experiments (suburban planning)
- Heat Release Rate and Smoke Volume Fraction Measurements

IMPROVEMENTS

- NIST Designed and built Calibration Burner
- Improved Safety and Experiment Running Procedures
- Modular Insitu Data Acquisition System
- Load Cell Systems
- Flue Gas Cleaning System Operation and Maintenance
- Flammable Liquid Fuel Delivery System
- Instrumentation Specialist (contractor)

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